



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/643,554	08/18/2003	Jeffrey J. Thramann	46620.830007.US1	4937

26582 7590 03/28/2007  
HOLLAND & HART, LLP  
P.O BOX 8749  
DENVER, CO 80201

EXAMINER
----------

TYSON, MELANIE RUANO

ART UNIT	PAPER NUMBER
----------	--------------

3731

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/28/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/643,554

Applicant(s)

THRAMANN, JEFFREY J.

Examiner

Melanie Tyson

Art Unit

3731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 1-9, 19 and 20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 20 December 2006 has been entered.

### ***Election/Restrictions***

2. Applicant's election of Species III in the reply filed on 26 February 2007 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election **without traverse** (MPEP § 818.03(a)). Claims 1-9, 19, and 20 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

Art Unit: 3731

1. Determining the scope and contents of the prior art.
  2. Ascertaining the differences between the prior art and the claims at issue.
  3. Resolving the level of ordinary skill in the pertinent art.
  4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
5. Claims 10-14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martin (Patent No. 5,653,743).

Martin discloses a vascular stent graft system (see entire document) comprising a main vessel stent graft (for example, see Figure 1; element 2/3) having at least one access port (7) that has a seating surface about its edge, at least one branch graft (for example, see Figure 5; elements 18) about a wall (i.e. reasonably close to) of the main vessel stent graft, and at least one connecting graft (8) having an engaging (or seating) surface (which is the outer surface) in a sealing relationship with the at least one branch graft (18) and with the seating surface about the edge of the access port (7) on the wall of the main vessel stent graft (2/3). Martin further discloses a plurality (or corresponding number) of connecting grafts (one between 18 and 2/3, and one between 2/3 and 19; for example see Figure 5 for illustration), and the access port (7) has at least one radiopaque marker (for example, see column 3, lines 8-11).

With respect to claims 10, 14, and 16 Martin further teaches alternate embodiments in which the grafts may comprise an expandable material, such as the expandable mesh support (or stent) used in the main vessel stent graft (for example, see column 2, lines 17-19, column 3, lines 3-5, and column 4, lines 8-9). Martin teaches that stents provide support to the grafts to prevent them from kinking or twisting (for example, see column 2, lines 15-17). Therefore, it would have been obvious to one of

Art Unit: 3731

ordinary skill in the art at the time the invention was made to construct the at least one connecting graft and the at least one branch graft with expandable stents in order to prevent those grafts from kinking and twisting once deployed.

With respect to claim 16, Martin further teaches alternate embodiments in which the radiopaque marker is placed in various locations (for example, see column 3, lines 8-22). Martin teaches that radiopaque markers are used to assist in positioning the grafts when using fluoroscopy, thus resulting in proper orientation of the grafts (for example, see column 3, lines 8-22). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a radiopaque marker on the proximate end of the at least one branch stent graft in order to be able to properly position the stent graft.

With respect to claims 10-14 and 16, the functional language regarding intended use (for example, in a main vessel and a branch vessel to provide flow through an aneurysm) has been carefully considered, but deemed not to impose any structural limitations on the claims to make them patentably distinguishable over Martin's device, which is capable of being used as claimed if one desires to do so.

Claim 11 is being treated as a product by process limitation, in that "the access port...is formed by puncturing the wall of the main vessel stent graft and expanding the tear in a controlled pattern" refers to the process of forming the access port and not to the final product created. As set forth in MPEP 2113, "Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of

Art Unit: 3731

production. If the product in the product-by-process claim is the same as or obvious from a product in the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695,698,227 USPQ 964,966 (Fed. Cir. 1985). Examiner has evaluated the product claim without giving much weight to the method of its manufacture. Therefore, in this case, an access port as described above wherein the access port is formed by puncturing the wall of the main vessel stent graft and expanding the tear in a controlled pattern is directed to the method of making the access port and not to the final product made. It appears that the product disclosed by Martin would be the same or similar as that claimed; especially since both applicant's product and the prior art product have the same final structure of a stent graft having an access port.

6. Claims 15, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martin in view of Venbrux (Patent No. 5,43,497). Martin discloses a vascular stent graft as described above (including an expandable branch vessel seating surface; see rejection above), however, fails to disclose the proximate end of the branch connecting stent graft is flared. Venbrux discloses a vascular graft system (see entire document). Venbrux teaches the proximate end of the stent graft is flared in order to seal the puncture in the lumen when the device is installed to bypass a blockage or to create communication between an artery and a vein (for example, see column 3, lines 35-41). Therefore, to construct the proximate end of the connecting stent graft of Martin flared as taught by Venbrux would have been obvious to one of ordinary skill in the art the time invention was made in order to provide a seal between the stent grafts.

### ***Response to Arguments***

7. Applicant's arguments filed 09 October 2006 have been fully considered but they are not persuasive. Applicant argues primarily that Martin does not disclose each and every element of the claimed invention. Applicant argues that Martin does not disclose a main vessel stent graft, a branch vessel stent graft, and a connecting stent graft. Examiner respectfully disagrees. Martin discloses a main vessel stent graft (2/3), a branch vessel stent graft (18), and a connecting stent graft (8; see rejection above for further details).

Applicant further argues that the stents of Martin do not reside in aneurysms and the connecting stent graft does not travel through an aneurysm to a branch vessel. Placing the stents in aneurysms and branch vessels is merely reciting the intended use of the claimed apparatus. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

### ***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie Tyson whose telephone number is (571) 272-9062. The examiner can normally be reached on Monday through Friday 9:00 a.m. - 5:30 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anhtuan Nguyen can be reached on (571) 272-4963. The fax phone

Art Unit: 3731

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Melanie Tyson   
March 23, 2007

  
ANH TUAN T. NGUYEN  
SUPERVISORY PATENT EXAMINER  
